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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,376	03/25/2004	Akihito Kusano	033498-025	4730

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EXAMINER

SCHWARTZ, CHRISTOPHER P

ART UNIT PAPER NUMBER

3683

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/808,376

Applicant(s)

KUSANO, AKIHITO

Examiner

Christopher P. Schwartz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement has been received and considered.

Specification

2. The disclosure is objected to because of the following informalities: Page 4 of the specification it is unclear what is meant by "one" under the numerals 1-4 in their description of the hydraulic pressure supply device.

– Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kusano et al. US 2003/0020328 ('328) in view of either Isono et al. US 2003/0020327 ('327) or Isono et al. US 2001/0028194 ('194)

Regarding claim 1 Kusano et al. '328 discloses a device with which applicant is well familiar. Note the pressure adjusting valve (as per applicants) at 6.

Kusano et al. Lacks showing a bottoming detector for detecting the bottoming of the master piston.

Isono et al. '327 or '194 teach such a bottoming detector. Isono '327 teaches this on page 13 paragraph 0158 and Isono '194 teaches this on pages 6-9. Note paragraph

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0090 on page 8 and paragraph 0103 on page 9. Note that increases in braking pressure are controlled via the valving in both references upon a detection of the bottoming of the piston as due to fluid leakage.

One having ordinary skill in the art at the time of the invention would have found it obvious to have provided the system of Kusano et al. '328 with the bottoming detector and the appropriate valving (i.e. hydraulic pressure supply device) necessary to overcome a drop in fluid pressure due to leakage, as taught by either Isono '327 or '194 to offer a safer braking system that can compensate for system fluid leakage. Note that as broadly claimed the pump 42 and accumulator 43 could serve as the hydraulic pressure supply device in Kusano et al and the valving would obviously be controlled in such a way as to shut off or re-route the fluid around the leaking circuit of the brake system.

Regarding claims 2-8 to adjust the output pressure from the hydraulic supply device (i.e. specific valving arrangement of Kusano et al. as modified) to the pressure adjusting valve 6 subject to detecting a predetermined pressure in the master cylinder would have been obvious simply dependent upon the particular level of safety desired from the system or operator pedal feel.

5. Claims 9,10 rejected under 35 U.S.C. 103(a) as being unpatentable over Kusano, as modified by either Isono reference as applied to claims 1,2 above, and further in view of JP 61-37140 ('140)..

Regarding claims 9,10 although Kusano as modified lacks showing an alarm for detecting the bottoming of the piston, such a device is taught by JP '140 as applicant's

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have described in their specification on page 2 paragraphs 4 and 5. Such a display device could serve as an "alarm", as broadly claimed.

To provide increased safety one having ordinary skill in the art would have found it obvious to have provided Kusano et al., as modified by either reference to Isono, with an alarm to alert the driver of that leakage in the brake system is occurring.

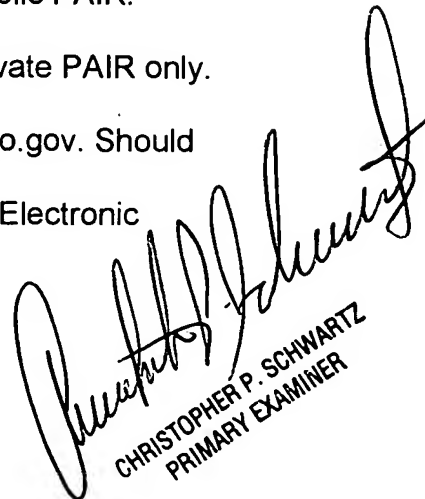
Conclusion

6. - The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references cited have been cited for showing similar features to that claimed by applicants.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P. Schwartz whose telephone number is 703-308-0576. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack W. Lavinder can be reached on 703-308-3421. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



CHRISTOPHER P. SCHWARTZ
PRIMARY EXAMINER

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10/29/04